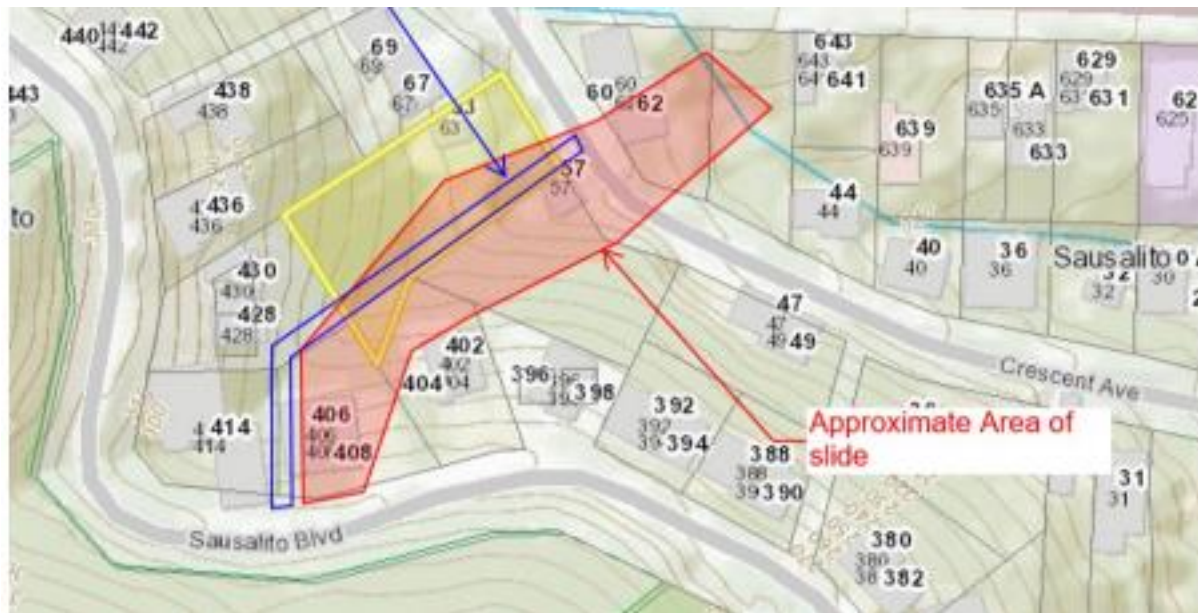




## Mudflow Debris Removal FAQ 10.3.19

### Where is the mudflow debris?

The mudflow debris is located between Sausalito Boulevard and Crescent Avenue and also extends below Crescent. The debris was created by the mudflow that struck the Hurricane Gulch neighborhood of Sausalito in the early morning of February 14, 2019. The mudflow originated on land above Sausalito Boulevard and consisted of an estimated 6,000 to 7,000 cubic yards of earth and vegetation. There were no fatalities or serious injuries as a result of the mudflow, but two dwelling units and three carports were destroyed. The largest debris pile is located on and around Crescent Avenue near the base of the slope.



### What does the mudflow debris consist of?

The mudflow debris consists of soil, trees and other vegetation, building materials, household items, and damaged automobiles. The mudflow debris likely contains potentially hazardous materials including household chemicals, automobile fluids, asbestos and lead building materials, among other substances.

### Who is doing the debris removal?

Removal of the more than 5,000 tons of material is being performed by Resource Environmental, Inc. of Long Beach, California, which was awarded the project after a competitive bidding process. The selected contractor was found to be capable of efficiently removing large volumes of potentially hazardous debris and lawfully disposing of all debris according to all local, state, and federal regulations. The professional engineering consulting firm of Harris & Associates is assisting the City with project management, design work, construction management, and grant coordination.

**When did the removal of mudflow debris begin?**

Resource Environmental established operations at the debris field on September 23, 2019. Debris hauling started the following week.

**When will debris removal be completed?**

The debris-removal contract specifies that the contractor complete the work within 90 calendar days after the work commences. The date could be extended if there are unforeseen circumstances related to debris removal. It is also possible the work could be completed more quickly than 90 days. We will continue to provide updates as the work progresses.

**What are the hours for debris removal?**

The City is committed to removing the debris as quickly as possible while at the same time ensuring that we comply with all applicable State and Federal regulations. On June 11, 2019, the City Council approved an extension of the City's normal construction hours for debris removal related to the February 14 mudflow. The approved maximum work hours are Monday through Saturday, 7:00 a.m. to 7:00 p.m. However to start, construction hours will be Monday through Thursday from 7:00 a.m. to 5:00 p.m.

**What equipment will be used for debris removal?**

Heavy equipment is likely to be used for debris removal including dump trucks and excavators. Power tools likely to be used including chainsaws and metal cutting equipment.

**Will debris removal be noisy?**

Yes. Area residents should be prepared for a significant amount of noise from heavy equipment and power tools.

**How much will the debris removal cost?**

The project is estimated to cost \$1.8 million. If the contractor and the City conform to all state and federal regulations, the City will be eligible to be reimbursed for up to 93.75% of its costs.

**What will the process be for debris removal?**

The work will include examining mudflow debris, loading debris, hauling debris to approved and appropriate landfills or disposal facilities, and dumping the debris. The contractor will begin by clearing debris from Crescent Avenue. They will then remove debris below Crescent and work their way up the hillside.

**Will removing hazardous material create a health hazard for area residents?**

No. If hazardous material is found, the contractor will follow strict precautions to isolate it, minimize exposure to it, and remove it. An industrial hygienist will be on-site to identify hazardous material as the debris field is cleared and provide direction for proper disposal. Once the work has been completed, the site will be tested for the presence of hazardous materials.

**Where will equipment be staged for debris removal?**

The available space between Crescent Avenue and Main Street has been designated as the staging area and fenced off. Foot access will be provided to residents at all times.

**What route will trucks take when they remove material from the site?**

The truck route will be from Crescent Avenue, East on Main Street, South to Second Street, East on South Street, South on Alexander Avenue and finally to US 101. The route is approved by the City.

**What sort of traffic controls will be in place during debris removal?**

The contractor will deploy flaggers, advance warning signs and changeable message boards, as needed.

**What are the likely impacts to parking and traffic circulation in the areas adjacent to the debris pile on Crescent Avenue?**

The loss of additional parking spaces on Crescent Avenue and Main Street is necessary to accommodate the trucks and other heavy equipment that will be operating in the area. There will be impacts to traffic circulation in these areas as well along the truck hauling route

**What will the process be for returning personal items in the debris pile to their rightful owners?**

Based on the destructive force of the mudflow event, the City anticipates that most personal property in the debris pile has been destroyed. Renters and property owners with belongings that may remain buried in the debris pile have had an opportunity to submit a list of items to the City. During debris removal, inspectors working for the City's construction management consultant will act as onsite "spotters". If recoverable personal items from the lists are identified the spotters will direct the contractor to stop work and separate out those items for collection by the owner

**Will security be in place to keep people from disturbing the debris pile while removal efforts are underway?**

Yes, the contractor will be required to fence off the work area.

**Who should I contact if I have any questions or concerns about the debris removal process?**

Please contact Harris & Associates staff with questions:

Cyrus Bouzar, Resident Engineer - [cyrus.bouzar@weareharris.com](mailto:cyrus.bouzar@weareharris.com)

Eric Vaughan, Project Manager - [eric.vaughan@weareharris.com](mailto:eric.vaughan@weareharris.com)

**What happens after all of the debris is removed?**

Upon completion of the work, the contractor will clean all portions of the project area. The contractor will also seed the affected area with grass and place jute netting across it. The City will then move to the next stage of the recovery process, which include the replacement of temporary utility installations with permanent improvements, potential long term slope stabilization and roadway repair.

**Who should I contact if I have more questions?**

Please contact Director of Communications Abbot Chambers at [achambers@sausalito.gov](mailto:achambers@sausalito.gov) or (415) 289-4123.